

November 1, 2004

Mr. Karl W. Singer  
Chief Nuclear Officer and  
Executive Vice President  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE  
BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2 AND 3, LICENSE RENEWAL  
APPLICATION (TAC NOS. MC1704, MC1705 AND MC1706)

Dear Mr. Singer:

By letter dated December 31, 2003, Tennessee Valley Authority (TVA) submitted an application pursuant to 10 CFR Part 54, to renew the operating licenses for the Browns Ferry Nuclear Plant, Units 1, 2 and 3, for review by the U.S. Nuclear Regulatory Commission (NRC). The NRC staff is reviewing the information contained in the license renewal application (LRA) and has identified areas where additional information is needed to complete the review. Specifically, the enclosed requests for additional information (RAIs) are related to the Electrical and Instrumentation & Control Systems (I&C), Section 2.5.

Based on discussions with Ken Brune of your staff, a mutually agreeable date for your response to the RAIs is within 30 days from the date of this letter. If you have any questions regarding this letter or if circumstances result in your need to revise the response date, please contact me at 301- 415-1594 or by e-mail at [yks@nrc.gov](mailto:yks@nrc.gov).

Sincerely,

**/RA/**

Yaira K. Diaz-Sanabria, Project Manager  
License Renewal Section A  
License Renewal and Environmental Impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Docket Nos. 50-259, 50-260 and 50-296

Enclosure: As stated

cc w/encl: See next page

November 1, 2004

Mr. Karl W. Singer  
Chief Nuclear Officer and  
Executive Vice President  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE  
BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2 AND 3, LICENSE RENEWAL  
APPLICATION (TAC NOS. MC1704, MC1705 AND MC1706)

Dear Mr. Singer:

By letter dated December 31, 2003, Tennessee Valley Authority (TVA) submitted an application pursuant to 10 CFR Part 54, to renew the operating licenses for the Browns Ferry Nuclear Plant, Units 1, 2 and 3, for review by the U.S. Nuclear Regulatory Commission (NRC). The NRC staff is reviewing the information contained in the license renewal application (LRA) and has identified areas where additional information is needed to complete the review. Specifically, the enclosed requests for additional information (RAIs) are related to the Electrical and Instrumentation & Control Systems (I&C), Section 2.5.

Based on discussions with Ken Brune of your staff, a mutually agreeable date for your response to the RAIs is within 30 days from the date of this letter. If you have any questions regarding this letter or if circumstances result in your need to revise the response date, please contact me at 301- 415-1594 or by e-mail at [yks@nrc.gov](mailto:yks@nrc.gov).

Sincerely,

/RA/

Yaira K. Diaz-Sanabria, Project Manager  
License Renewal Section A  
License Renewal and Environmental Impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Docket Nos. 50-259, 50-260 and 50-296

Enclosure: As stated

cc w/encl: See next page

ADAMS Accession no. ML043060492

DISTRIBUTION: See next page

\*Input provided by memo

Document Name: E:\Filenet\ML043060492.wpd

OFFICE	PM:RLEP	PM:RLEP	LA:RLEP	SC:EEIB	SC:RLEP
NAME	YDiaz-Sanabria	RSubbaratnam	YEdmonds	RJenkins*	SLee
DATE	10/29/04	10/29/04	10/29/04	9/27/04	11/1/04

OFFICIAL RECORD ONLY

DISTRIBUTION: Dated: November 1, 2004    Accession No.: ML043060492

HARD COPY:

RLEP RF

Yaira Diaz-Sanabria (PM)

Ram Subbaratnam (PM)

**E-MAIL:**

RidsNrrDrip

RidsNrrDe

G. Bagchi

K. Manoly

W. Bateman

J. Calvo

R. Jenkins

P. Shemanski

J. Fair

RidsNrrDssa

RidsNrrDipm

D. Thatcher

R. Pettis

G. Galletti

K. Naidu

C. Li

M. Itzkowitz (RidsOgcMailCenter)

R. Weisman

M. Mayfield

A. Murphy

S. Smith (srs3)

S. Duraiswamy

Y. L. (Renee) Li

RLEP Staff

-----

K. Jabbour

C. Julian (RII)

S. Cahill (RII)

A. Hodgdon

C. Carpenter

D. Coe

E. Kleeh

A. Howe

A. Pal

J. Lazevnick

**BROWNS FERRY NUCLEAR, UNITS 1, 2 AND 3**  
**LICENSE RENEWAL APPLICATION**  
**REQUEST FOR ADDITIONAL INFORMATION (RAI)**  
**ELECTRICAL AND INSTRUMENTATION AND CONTROL SYSTEMS**  
**SECTION 2.5**

RAI 2.5-1

Section 2.5.1 of the LRA states that scoping and screening of electrical and I&C components was performed using the "spaces" approach described in Section 2.1. Were all plant spaces evaluated under this methodology? If any spaces were excluded from evaluation identify those spaces that were excluded and provide the reason why each space was excluded.

RAI 2.5-2

Section 2.5.1 of the LRA states that if a component in a commodity group existed in an area where the area conditions exceeded the commodity group's limiting environmental parameters, a further evaluation could be performed to determine if the component was required for an in-scope system's intended function. Identify all the components that were excluded from the scope of license renewal as a result of these further evaluations and provide the basis used for excluding each component.

RAI 2.5-3

On the three license renewal drawings identified in LRA Section 2.5.1 that depict the recovery path for station blackout (SBO), identify the location of each commodity group component in the recovery path circuit. Do the SBO recovery path circuits include the control circuit wiring that is associated with the power circuits shown on the drawings? If not, why? Are there any underground power circuits used in the SBO recovery paths? If so, were they identified as requiring an AMR? If not, why?

RAI 2.5-4

During a telephone conference held on July 28, 2004, in response to draft request for additional information, D-RAI 3.6-3, the applicant stated that in 1997 a XLPE insulated CCWP capacitor bank cable failed in-service at BFN. Why were these cables not included within the scope of license renewal and identified as a component that requires an AMR?

Enclosure

Tennessee Valley Authority

cc:

Mr. Ashok S. Bhatnagar, Senior Vice  
President  
Nuclear Operations  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

Mr. James E. Maddox, Vice President  
Engineering & Technical Services  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

Mr. Michael D. Skaggs, Site Vice President  
Browns Ferry Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Decatur, AL 35609

General Counsel  
Tennessee Valley Authority  
ET 11A  
400 West Summit Hill Drive  
Knoxville, TN 37902

Mr. John C. Fornicola, Manager  
Nuclear Assurance and Licensing  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

Mr. Kurt L. Krueger, Plant Manager  
Browns Ferry Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Decatur, AL 35609

Mr. Jon R. Rupert, Vice President  
Browns Ferry Unit 1 Restart  
Browns Ferry Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Decatur, AL 35609

**BROWNS FERRY NUCLEAR PLANT**

Mr. Robert G. Jones  
Browns Ferry Unit 1 Plant Restart Manager  
Browns Ferry Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Decatur, AL 35609

Mr. Mark J. Burzynski, Manager  
Nuclear Licensing  
Tennessee Valley Authority  
4X Blue Ridge  
1101 Market Street  
Chattanooga, TN 37402-2801

Mr. Timothy E. Abney, Manager  
Licensing and Industry Affairs  
Browns Ferry Nuclear Plant  
Tennessee Valley Authority  
P.O. Box 2000  
Decatur, AL 35609

Mr. Bobby L. Holbrook  
Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
Browns Ferry Nuclear Plant  
10833 Shaw Road  
Athens, AL 35611-6970

State Health Officer  
Alabama Dept. of Public Health  
RSA Tower - Administration  
Suite 1552  
P.O. Box 303017  
Montgomery, AL 36130-3017

Chairman  
Limestone County Commission  
310 West Washington Street  
Athens, AL 35611

Mr. Fred Emerson  
Nuclear Energy Institute  
1776 I St., NW, Suite 400  
Washington, DC 20006-2708

Tennessee Valley Authority

- 2 - **BROWNS FERRY NUCLEAR PLANT**

cc:

Ken Brune, Manager  
Browns Ferry License Renewal Project  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801